## BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF DELAWARE, THE DELAWARE DEPARMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL (ENERGY DELAWARE OFFICE), THE OFFICE OF MANAGEMENT AND BUDGET, AND THE CONTROLLER GENERAL'S OFFICE

IN THE MATTER OF INTEGRATED	
RESOURCE PLANNING FOR THE	)
PROVISION OF STANDARD OFFER	) PSC DOCKET NO. 06-241
SUPPLY SERVICE BY THEDELMARVA	)
POWER & LIGHT COMPANY UNDER	)
26 DEL C. SEC. 1007 (c) & (d):	)
REVIEW AND APPROVAL OF THE	)
REQUEST FOR PROPOSALS FOR THE	)
CONSTRUCTION OF NEW	)
GENERATION RESOURCES UNDER	)
26 DEL. C. SEC. 1007 (d)	)
(OPENED JULY 25, 2006)	

COMMENTS OF ALAN MULLER AND OF GREEN DELAWARE ON DELMARVA POWER AND STATE AGENCIES GENERATION EVALUATION REPORTS

This proceeding was initiated by the Delaware General Assembly in House Bill 6, 143<sup>rd</sup> General Assembly, signed by Gov. Minner on April 4, 2006. This law is codified at 26 Del. C. Sec. 1007 and cited as the Electric Utility Retail Customer Supply Act of 2006 ("ECURSA," or the "Act.")

Delaware has only one regulated electric utility, Delmarva Power and Light Company ("Delmarva, or "DP&L"), a unit of PEPCO. The Act applies only to the standard offer service (SOS, "retail" load of Delmarva.

The primary intent of the Delaware General Assembly appears to have been to address concerns arising from a major step-change in retail electricity rates in Delaware—a one-step increase of approximately 60 percent. The Act focuses on "price" and "price stability," without directing which is to have priority. The Act also reinstitutes Integrated Resource Planning (IRP) for Delmarva, calls for the involvement of four state agencies, and requires consideration of "short- and long-term contracts for the procurement of power necessary to serve its customers" and ownership and operation of "... facilities for the generation of electric power ..."

In effect, the Act directs a reconsideration of the present "restructured" operations of Delmarva, which now buys all retail load power in the "regional wholesale market." Under the Act, at least 30 percent of the SOS must continue to be purchased in this manner. In supplying the remainder, consideration is to be given to long-term Power Purchase Agreements (PPAs), and/or self-owned generation.

These changes are not mandated, and Delmarva has consistently indicated a preference for the *status quo*.

Delmarva identifies a "retail obligation for [Delaware] SOS customers" of 1027 MW, about 25 percent of the total Delmarva load (several states) and 38 percent of Delmarva's Delaware load (based on 2005 peak one hour load). 70 percent of this is 17 percent of Delmarva's total peak load and 27 percent of Delmarva's Delaware peak load. Delmarva further argues that "... the load available to be served by a PPA, per the Act, is <u>below</u> 400 WM 86% of the hours in the year, averaging only 289 MW." Delmarva seems to argue that any excess would have to be sold, rather than serving other Delmarva load.

Three bidders have pursued long-term PPAs: NRG, with a proposal for an Integrated Gasification Combined Cycle (IGCC) coal plant, Bluewater Wind with proposals for offshore wind "parks," and Conectiv Delmarva Generation (another unit of PEPCO), for a gas turbine combined cycle unit at the existing Edge Moor/Hay road site.

This matter has generated interest unprecedented in Delaware utility regulatory proceedings. At least, it seems unprecedented since a decades-ago controversy over whether Delmarva should build a nuclear power plant in Delaware. Public interest and political controversy has focused primarily on the perceived alternatives of the NRG coal bid vs. the Bluewater wind bid.

Comments have been received from dozens of interested persons, not only in Delaware but from Colorado, Minnesota, and other states. With few if any exceptions, those supporting the NRG coal bid feel they have an economic interest in doing so. Those supporting a wind project put priority on health, environmental, and global warming concerns.

A public opinion survey done by a group and the University of Delaware shows strong support for wind and strong opposition to increased coal generation.

The Delaware Department of Natural Resources and Environmental Control (DNREC), the Division of Public Health, Green Delaware, Citizens for Clean Power, the Medical Society of Delaware, the US EPA, and other parties have identified serious health and environmental consequences from the present operation of coal power plants in Delaware. The DNREC has promulgated a regulation calling for a substantial cleanup of existing facilities. This regulation is being appealed by two of the RFP bidders: NRG and Conectiv.

Since the Act was passed, concern (in the mainstream) about global warming has greatly increased While the US federal government continues to oppose meaningful action, the rest of the world, including US state and local governments, recognizes that carbon emissions must be curtailed. "Carbon Capture and Sequestration," sometimes mentioned as a positive attribute of IGCC coal burners, is not a "live option" at this time and may never be.

Kempton, Firestone, Garvine, and others in the College of Marine and Earth studies at the University of Delaware have identified a very large wind power resource available to Delaware—potential installed capacity of over 19,000 MW, with average production of 7400 MW. Average total Delaware (state) load is about 1,300 MW (Kempton).

The three bidders have all, to varying degrees, resisted public disclosure of vital details of their bids, including price and emissions information. NRG has been by far the worst offender, even appealing to the Court of Chancery against rulings of the Commission. Green Delaware has asked that NRG be disqualified as a bidder due to withholding of information from the public (and lack-of-candor in regard to various other matters).

The work of the "consulting team" retained by the "state agencies," especially "INTERIM REPORT ON DELMARVA POWER IRP IN RELATION TO RFP," dated April 4, 2007, has identified many deficiencies in Delmarva's arguments against a PPA.

Green Delaware is following controversies over new coal generation in Florida, Minnesota, Colorado, Indiana, Maryland and Ohio. There are many common elements including (1) efforts to minimize public participation, because (2) these proposals cannot stand the light of day. When the true balance of attributes, costs, and consequences are exposed, new coal fails.

Delaware, however, is unique and fortunate in having a "direct" competition between a coal and wind project, almost with sight of each other. We put direct in quotes because wind energy and coal energy are not the same. Wind has the overwhelming advantage of being mostly emission-free and offers protection against fuel price changes—since the wind itself is the fuel. Thus wind (along with demand side investments, not directly considered in this docket) uniquely offers two attributes Delaware seeks: near-zero emissions and price stability.

On the other hand, wind is generally considered a source of "energy" but not "capacity." This is a way of saying what we all know: "the wind doesn't blow all the time." This does NOT mean wind is an unsatisfactory energy source for Delaware. It does mean the special characteristics of wind power have to be allowed for, in these ways:

(1) Delaware is part of the PJM "interconnection," containing about 165,000 MW of generating capacity spread among about 1100 generating units of all types. Further, the PJM is developing a "common market" with the Midwest Independent System Operator (MISO) which is of similar size: 170,581 MW.

"The Midwest Independent Transmission System Operator, Inc. and PJM Interconnection are working together to develop complementing system operations and one robust, non-discriminatory wholesale electricity market to meet the needs of all customers and stakeholders in 23 states, the District of Columbia and the Canadian province of Manitoba. The market is being developed through an open stakeholder process and is being designed to serve residents regardless of whether they reside in states with bundled or unbundled retail rates." (<a href="http://www.miso-pjm.com/">http://www.miso-pjm.com/</a>). (See map!)

Thus Delaware's total generating capacity of about 3,390 MW is to be seen in the context of a "common market" 100 times larger--340,000 MW, including the hydro power resources of Manitoba and the wind resources of Minnesota and the Dakotas.

(This is not to argue that bulk power transfer from Manitoba or the Dakotas would make technical or economic sense, but to point out that the variability of a 200 offshore-Delaware wind project is a minor in the context of our power markets.)

(2) More locally, the variability of wind can be offset by pairing it with gas capacity. Gas and wind are highly complimentary: Wind is expensive to build but cheap to operate; gas is the reverse. Wind is variable but gas (turbine) has a rapid response (ramp rate) well suited to following variations in wind output. Demand for gas is seasonally low during summer-peak times. Delmarva power has several hundred MW of gas capacity and FPL has built several hundred more just North of the Delaware/PA state line.

## **Conclusions**

There are logical problems in moving ahead with a PPA in the absence of a completed IRP process. There are problems in moving ahead without having DSM proposals in the competition.

Nonetheless, we consider that the need to develop our offshore wind resources is adequately demonstrated. Development of these resources has the potential to provide many ancillary economic benefits to Delaware.

A sufficient record has been developed to conclude that (1) the NRG proposal should be excluded on multiple grounds, (2) the Bluewater wind project should move ahead, <u>in concert with a robust IRP process</u>, (3) acceptance of the Conectiv bid, aside from concerns of self-dealing, would amount to little more than (4) the no-bid alternative of *status-quo* for Delaware.

The Conectiv and NRG proposals should not receive further consideration because of the pending appeals of the cleanup regulations applying to their existing facilities. We simply see no reason why operators who do not want to operate their existing facilities responsibly should be allowed or encouraged to build new capacity.

The state agencies' consultants suggest, in effect, that Bluewater Wind be subjected to an additional round of competition with on-shore regional wind developers. They suggest that electricity pricing might be lower from such on-shore facilities. However, this disregards the locational advantage of Delaware wind capacity and the ancillary economic benefits of developing a wind industry in Delaware.

Therefore, Green Delaware and Alan Muller (personally) recommend that the state agencies direct Delmarva Power to begin negotiating a PPA with Bluewater Wind.

Respectfully submitted,

Alan Muller Director, Green Delaware April 9, 2007 (April 6<sup>th</sup> having been a legal holiday)